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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,762	01/10/2007	Klaus-Diether Wiese	293518US0X PCT	9729

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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CAMPANELLO, FRANCIS C

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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06/02/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/588,762	<b>Applicant(s)</b> WIESE ET AL.	
	<b>Examiner</b> FRANK C. CAMPANELL	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/08/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/21/2007 and 11/08/2006 and 04/05/2008</u> .                | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claims 12-14 provides for the use of a mixture, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 12-14 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiwara et al (US 5220088).

3. Regarding claims 10 and 11, Fujiwara teaches a process for making isooctene (abstract). The patentability of the product is based upon the composition itself and not how the composition is made. The examiner believes that the isooctene of Fujiwara is not distinct from the isooctene claimed in the instant application.

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4. Claims 10, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaizik et al (US 6627782).

5. Regarding claims 10, 12 and 13, Kaizik teaches a process for making a olefin (abstract), an aldehyde or alcohol, from olefins having 8 to 12 carbon atoms. (column 2 lines 10-20 and column 3 lines 35-42) and a plasticizer alcohol (column 4 lines 21-25). This process includes using olefins of 8-12 carbon atoms to make alcohols for use as plasticizers and aldehydes. The examiner believes that the alcohol of Kaizik is not distinct from the alcohol claimed in the instant application.

6. Regarding claim 14, the production of isononanol is inherently in the groups of alcohols produced from olefins with 8-12 carbon atoms in the invention of Kaizik. (column 2 lines 8-20 and column 4 lines 45-55)

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-3, 5-9 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaizik et al (US 6627782) in view of Kukes et al (US 4465890).
4. Regarding claims 1-3 and 5-8 Kaizik teaches a process for preparing olefins that starts with molecules of 4-6 carbon atoms (column 1 lines 18-25. This starting material may be of a feed that is almost entirely of butenes. As such a feed with at least 3% isobutene, when almost the entire feed is to be butenes, is an obvious variant. Such streams include C4 fractions of an FCC plants, or C4 fractions of an FCC plant are obvious variants of the C4 fractions from a plant listed) and ends with molecules from 7-12 carbons. The synthesis comprises
  5. A. hydroformylating (column 2 lines 18-22)
  6. B. hydrogenating the aldehyde with a nickel or copper/chromium catalyst. (column 3 lines 35-55). Note that unreacted aldehyde is sent to become an alcohol by hydrogenating in column 30 line 40.
  7. C. preparing a 1-olefin by elimination of water from the alcohol (column 4 lines 25-32)
8. Kaizik does not teach D. Metathesis of the olefin.
9. Kukes teaches metathesis of a 1-olefin with another olefin to form an olefin having 8 to 12 carbon atoms with the elimination of ethylene (column 2 lines 15-40). The process uses a catalyst type as found in claim 5 of the instant application. (column 3 lines 30-60) Kukes does not teach steps A-C. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the process of Kukes to modify

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the end product of Kaizik. If a person of ordinary skill in the art wanted to form a multitude of specific olefin products from the mixture taught in Kaizik, the invention of Kukes would provide an excellent mode of doing so. Such a method has the advantage of the synthesis of high purity olefins, suitable of a specialty market (Kukes column 1 lines 15-20).

10. Regarding claim 9, it would have been obvious to one of ordinary skill in the art at the time of the invention that the process of separating the 3-methyl-1-butene off after step C would be an obvious variant of the method taught in Kukes to control the end product. The combined invention of Kukes and Kaizik (as above) allows for process of steps C and D to having this obvious variant. Careful control of what olefin is used in the process of Kukes indicates what the end products of Kukes would be. Hence, the specific use of feed specialized to have no 3-methyl-1-butene would result in a directed end product. Such a directed end product would be an intended use of the invention of Kukes. The invention of Kukes includes production of olefins for a specialty market.

Regarding claim 14, the production of isononanol is an obvious variant of the alcohols produced in the method taught by Kaizik.

***Allowable Subject Matter***

11. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK C. CAMPANELLO whose telephone number is (571)270-3165. The examiner can normally be reached on Mon-Fri 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FCC

/Walter D. Griffin/  
Supervisory Patent Examiner, Art Unit 1797